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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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W. Paul Willes

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EXAMINER

BHATIA, AJAY M

ART UNIT

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2145

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/725,844	Applicant(s) WILLES ET AL.	
	Examiner Ajay Bhatia	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,24-26,39,59-61,78,101-103,114,133-135 and 148-158 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,24-26,39,59-61,78,101-103,114,133-135 and 148-158 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/22/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

Applicant's arguments with respect to claims 1,24-26,39,59-61,78,101-103,114,133-135 and 148-158 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 148 and 149 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims are directed to a higher ranking, the specification appears to only discuss lower ranking nodes. Examiner has reviewed the specification and specifically sufficient enablement is not provided by paragraph 70 (page 39) of the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 and 39 recite the limitation "said compression parameters in said first bandwidth adjustment module" in line 17. There is insufficient antecedent basis for this limitation in the claim. Application previous refers to compression parameters in a compression module, but does not refer to any compression parameters with in the

bandwidth adjustment module. Please note claim 39, has the same antecedent basis issue. For the purposes of examination the compression parameters of the compression module are changed by the first bandwidth adjustment module.

Claim 39 recites the limitation "configurable as a master node, a slave master node and a network node" this causes confusion as to if the nodes is a master node, slave node and network node simultaneously.

Claim 133 recites the limitation "master node" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 114 or 133 makes no previous mention of a master node.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 24-26, 78, 101-103, 114, and 133-135 are rejected under 35 U.S.C. 102(e) as being anticipated by Campbell (US Patent Application Publication 20030140159).

For claim 1, Campbell teaches, a system for allocating bandwidth on a network comprising:

one or more network nodes wherein said one or more network nodes further comprises a first processing element, a compression module, a first local network interface, and a first bandwidth adjustment module, wherein said compression module further comprises a plurality of compression parameters and said first processing element controls said bandwidth adjustment module, said first local network interface, and said compression module; (Campbell, paragraphs 112-115, server)

a data interface connected to said one or more network nodes; (Campbell, paragraphs 112-115, network)

a master node wherein said master node further comprises a second processing element, a second local network interface, and a second bandwidth adjustment module, and wherein said second processing element controls said second network interface and said second bandwidth adjustment module; (Campbell, paragraphs 112-115, client)

wherein said one or more network nodes and said master node communicate using said first local network interface and said second network interface, wherein said first local network interface and said second local network interface communicate over a local network having changing network conditions; (Campbell, paragraphs 112-115, dynamically adapts to network conditions)

and wherein said second bandwidth adjustment module dynamically changes at least one of said compression parameters in said first bandwidth adjustment module based on changing network conditions on the local network wherein said changing network conditions are detected by said second local network interface, and

wherein said changing network conditions affect network bandwidth. (Campbell, paragraphs 112-115, dynamically adapts to network conditions)

For claim 24, Campbell teaches, a system for allocating bandwidth on a network as recited in claim 1 further comprising an external network connected to said master node. (Campbell, paragraph 96 WWW)

For claim 25, Campbell teaches, a system for allocating bandwidth on a network as recited in claim 24 further comprising a remote monitoring station connected to said external network wherein said remote monitor station receives data from said data interface. (Campbell, paragraph 107 feedback)

For claim 26, Campbell teaches, a system for allocating bandwidth on a network as recited in claim 24 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Campbell, paragraph 97, internet server)

For claim 78, Campbell teaches, a method for allocating bandwidth on a network comprising the steps of:

receiving data on a data interface on a network node which comprises a first bandwidth adjustment module, a first local network interface, and a compression

module with a plurality of compression parameters; (Campbell, paragraphs 112-115, server)

sampling network conditions from a second local network interface with a second bandwidth adjustment module in a master node, wherein said first local network interface and said second local network interface communicate over a local network having changing network conditions; (Campbell, paragraphs 112-115, dynamically adapts to network conditions, client)

determining the bandwidth requirements for data received on said data interface based on said changing network conditions in said second bandwidth adjustment module, wherein said changing network conditions affect network bandwidth; (Campbell, paragraphs 112-115, dynamically adapts to network conditions)

and notifying said first bandwidth adjustment module of said bandwidth requirements which causes said network node to change said compression parameters for said received data. (Campbell, paragraphs 112-115, dynamically adapts to network conditions)

For claim 101, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 78 further comprising an external network connected to said master node. (Campbell, paragraph 96 WWW)

For claim 102, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 101 further comprising a remote monitor station connected

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to said external network wherein said remote monitor station receives data from said data interface. (Campbell, paragraph 107 feedback)

For claim 103, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 101 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Campbell, paragraph 97, internet server)

For claim 114, Campbell teaches, a method for allocating bandwidth on a network comprising:

receiving data on a data interface on a first network node which comprises a first bandwidth adjustment module, a first local network interface, and a compression module with a plurality of compression parameters; (Campbell, paragraphs 112-115, server)

sampling network conditions from a second local network interface with a second bandwidth adjustment module in a second network node, wherein said first local network interface and said second local network interface communicate over a network having changing network conditions; (Campbell, paragraphs 112-115, dynamically adapts to network conditions, client)

determining the bandwidth requirements for data received on said data interface based on said changing network conditions in said second bandwidth

adjustment module, wherein said changing network conditions affect network bandwidth; (Campbell, paragraphs 112-115, dynamically adapts to network conditions) and notifying said first bandwidth adjustment module of said bandwidth requirements which causes said first network node to change said compression parameters for said received data. (Campbell, paragraphs 112-115, dynamically adapts to network conditions)

For claim 133, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 114 further comprising an external network connected to said master node. (Campbell, paragraph 96 WWW)

For claim 134, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 133 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface. (Campbell, paragraph 107 feedback)

For claim 135, Campbell teaches, a method for allocating bandwidth on a network as recited in claim 133 wherein said external network is a network selected from the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Campbell, paragraph 97, internet server)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 39, 59-61, 148-152, are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Basak et al. (US Patent 6,122,673).

For claim 39, Campbell teaches, a system for allocating bandwidth on a network comprising:

a first network node wherein said first network node further comprises a first processing element, a first bandwidth adjustment module, a first local network interface, and a compression module wherein said compression module contains a plurality of compression parameters and wherein said first processing element controls said first bandwidth adjustment module, said first local network interface, and said compression module; (Campbell, paragraphs 112-115, server)

a data interface connected to said first network node; (Campbell, paragraphs 112-115, network)

a second network node configurable as a master node, wherein said second network node further comprises a second processing element, a second bandwidth adjustment module, a second local network interface, and wherein said second processing element controls said second local network interface and said second bandwidth adjustment module; (Campbell, paragraphs 112-115, client)

a third network node, wherein said third network node further comprises a third processing element, a third bandwidth adjustment module, a third local network interface, a third compression module wherein said third compression module contains a plurality of compression parameters, and wherein said third processing element controls said third bandwidth adjustment module, said third local network interface and said third compression module wherein said first network node said second network node and said third network node electronically communicate using said first local network interface said second local network interface and said third local network interface; (Campbell, paragraphs 112-115, server, paragraph 77 sources)

and wherein said second bandwidth adjustment module dynamically changes at least one of said compression parameters in said first bandwidth adjustment module or said third bandwidth adjustment module based on network conditions on the local network wherein said network conditions are detected by said second local network interface. (Campbell, paragraphs 112-115, VDP)

Campbell fails to clearly disclose, a second network node configurable as a master node, a slave master node, and a network node

Basak teaches, a second network node configurable as a master node, a slave master node, and a network node (Basak, Col. 13 lines 30-50, hierarchical, controllers, connections, Col. 12 lines 59-67, propagates primary controller)

Campbell and Campbell are in the analogous filed of bandwidth allocation

Campbell and Campbell compatible because Basak is a ATM scheduler (Basak, Col. 5 lines 32-35) and Campbell works only any communication type network (Campbell, paragraph 16)

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Campbell with Basak because Basak allows for multiple improvements for ATM scheduling (Basak Col. 5 line 32 to Col. 6 line 35)

For claim 59, Campbell-Basak teaches, a system for allocating bandwidth on a network as recited in claim 39 further comprising an external network connected to said first second, or third network node. (Campbell, paragraph 96 WWW)

For claim 60, Campbell -Basak teaches, a system for allocating bandwidth on a network as recited in claim 59 further comprising a remote monitor station connected to said external network wherein said remote monitor station receives data from said data interface. (Campbell, paragraph 107 feedback)

For claim 61, Campbell -Basak teaches, a system for allocating bandwidth on a network as recited in claim 59 wherein said external network is a network selected from

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the group consisting of the Internet, a Local Area Network (LAN), and a Wide Area Network (WAN). (Campbell, paragraph 97, internet server)

For claim 148, Campbell-Basak teaches, the system of claim 39 wherein said second network node operates as a master node if no other node is a higher ranking node. (Campbell, Col. 13 lines 30-50, hierarchical, controllers, Col. 12 lines 59-67, propagates primary controller) The same motivation that was utilized in the rejection of claim 39, applies equally as well to claim 148.

For claim 149, Campbell-Basak teaches, the system of claim 39 wherein said second network node operates as a slave node if there is a higher ranking node. (Campbell, Col. 13 lines 30-50, hierarchical, controllers, Col. 12 lines 59-67, propagates primary controller) The same motivation that was utilized in the rejection of claim 39, applies equally as well to claim 149.

For claim 150, Campbell-Basak teaches, the system of claim 39, further comprising:

a local device identifier; (Campbell, paragraphs 112-115, client)

and wherein responsive to the local device identifier prohibiting the second network node from operating as a master node, the second network node operates as a network node. (Campbell, Col. 13 lines 30-50, hierarchical, controllers, Col. 12 lines 59-

67, propagates primary controller) The same motivation that was utilized in the rejection of claim 39, applies equally as well to claim 150.

For claim 151, Campbell-Basak teaches, the system of claim 39, wherein the master node is configured to control bandwidth for one or more data sources on the local network. (Campbell, paragraphs 77-80, sources)

For claim 152, Campbell-Basak teaches, the system of claim 39, wherein the first network node is configured to control bandwidth for one or more data sources connected to the first network node. (Campbell, paragraphs 77-80, sources)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 153-158 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campbell in view of Extending the power line LAN up to the neighborhood transformer (referred to as ExtLan).

For claim 153, Campbell fails to clearly disclose, the system of claim 1 wherein the network is a power line network.

ExtLan teaches, the system of claim 1 wherein the network is a power line network. (ExtLan, QOS in power lines, page 68)

Campbell and ExtLan are both in the field of network communication

Campbell and ExtLan are compatible since ExtLan is directed to communication transmission medium and Campbell works only any communication type network (Campbell, paragraph 16)

It would obvious to one of ordinary skill in the art at of the invention to combine Campbell with ExtLan because ExtLan provides the added improvement of allowing users to share printers and internet connection from different rooms in the same house. (ExtLan, introduction, page 64)

Claims 154 and 155 are rejected for similar reason to that of claim 153.

For claim 156, Campbell-ExtLan teaches, the system of claim 153, wherein one of the network conditions used by the second bandwidth adjustment module in changing the compression parameters comprises noise on the network from one or more devices connected to the power line network. (ExtLan, QOS in power lines, page 68) and (Campbell, paragraph 97, jitter)

It would be obvious to one of ordinary skill in the art at the time of the invention to combine Campbell with ExtLan because ExtLan provides the added improvement of allowing users to share printers and internet connection from different rooms in the same house. (ExtLan, introduction, page 64)

Claims 157 and 158 are rejected for similar reason to that of claim 156.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Notice of references cited (if appropriate).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-3906. Also any interview requests should be faxed directly to the examiner at (571)-273-3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on (571)272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason D Cardone/
Supervisory Patent Examiner, Art Unit 2145